



COMMONWEALTH of VIRGINIA
DEPARTMENT OF ENVIRONMENTAL QUALITY

STATE WATER CONTROL BOARD ENFORCEMENT ACTION
AMENDMENT TO
SPECIAL ORDER BY CONSENT
ISSUED TO
MASSANUTTEN PUBLIC SERVICE CORPORATION
(Permit number VA0024732)

SECTION A: Purpose

This is an Amendment to a Consent Special Order (hereinafter referred to as "the Amendment") issued under the authority of Va. Code § 62.1-44.15(8a), between the State Water Control Board and Massanutten Public Service Corporation ("Massanutten") for the purpose of revising certain provisions of that Consent Special Order (hereinafter referred to as "the Order") issued by the State Water Control Board to Massanutten on April 8, 2002.

SECTION B: Basis for Amendment

1. The Order required Massanutten to upgrade the sewage treatment plant ("the Plant") to meet final effluent limitations and to conduct acute and chronic confirmational toxicity testing after the completion of the new Plant.
2. On August 16, 2002, the Virginia Department of Health conditionally approved the plans and specifications for the Plant upgrade. One of the conditions of that approval was that as-built plans and specifications shall be submitted to and approved by the Virginia

Department of Health prior to issuance of a Certificate to Operate (“CTO”) for the upgraded plant.

3. DEQ issued a NOV on December 17, 2002, to Massanutten for apparent violations of BOD effluent limits in September 2002 and ammonia effluent limits in October 2002. The effluent violations occurred during Plant upgrade.
4. By memorandum dated January 10, 2003, Massanutten informed DEQ that the Plant upgrade would not be fully completed by the Order’s May 15, 2003 deadline. Massanutten expected Train Two of the Plant to be online and operating under a temporary CTO within days, but Train One was not expected to be complete until the end of July 2003. The company expected that all but the Train One equalization basin of Train One would be completed by the Order’s deadline. Massanutten attributed the delay in completion of construction to weather, problems in sequencing of the construction in the area of the second equalization basin and the master pump station, and to underground rock in the construction area.
5. By letter dated February 19, 2003, VDH indicated to Massanutten that the upgraded facility was ready to be operated in a single-train fashion (Train Two), however VDH did not issue a formal Certificate to Operate for the Plant.
6. DEQ issued a NOV on June 12, 2003, to Massanutten for apparent violations of BOD effluent limits in November 2002 through February 2003 and an ammonia effluent limit violation in November 2002. In addition, the NOV cited overflows from the collection system in February and March 2003, which are attributed to high rainfall. The effluent violations occurred during the period when the new Plant was not complete.
7. On June 27, 2003, DEQ met with Massanutten in an informal conference to discuss the NOV and the status of the completion of the Plant upgrade. During the June 27, 2003 meeting, Massanutten indicated that because of the extent of the recent inflow and infiltration (“I&I”) problems, it wanted to alter its original plans for constructing the Train One equalization basin to instead modifying part of its old wastewater lagoon to act as an equalization and I&I basin. The company was experiencing a more significant I&I problem than what was evident during the design phase of the Plant upgrade and determined that it would need a bigger equalization basin.
8. DEQ issued a NOV on August 26, 2003, to Massanutten for apparent violations of BOD effluent limits in April 2003 and for an unauthorized discharge location that was observed during an inspection conducted on June 27, 2003. The Permittee was operating both the old and the new plants with two separate outfalls. Massanutten’s Permit only authorizes discharges from one outfall, that for the old Plant, until the formal completion of the new 1.5 MGD Plant.
9. On September 11, 2003, DEQ met with Massanutten in an informal conference to discuss the August 26, 2003 NOV and the status of completion of the new Plant. The September 11, 2003, meeting included discussions of the Plant operations and the collection

system's I&I problem. During the meeting DEQ requested a plan and schedule of corrective actions to address the I&I problem.

10. By letter dated October 9, 2003, Massanutten submitted to DEQ a plan and schedule to address the I&I problem in the collection system.
11. The construction period for the Plant upgrade coincided with one of the wettest periods on record (fall 2002 through fall 2003) and Massanutten discovered that the Plant's wet weather influent flows were greater than anticipated. The I&I problem appeared to be more extensive than first thought. A statewide drought from 1999 to 2002 prevented Massanutten from recognizing the extent of the I&I problem and designing an upgraded Plant capable of handling and treating those wet weather flows. The increased flows caused Massanutten to reevaluate the sizing and redesign of the Train One flow equalization basin and to reexamine I&I rehabilitation work on the collection system. The change in approach delayed the construction of the Train Two flow equalization and I&I basin and ultimately the completion of the full Plant upgrade.
12. On March 25, 2004, DEQ met with Massanutten to discuss the status of the completion of the new Plant and the submittal of as-built plans and specifications for the new Plant. During the March 25, 2004 meeting, DEQ requested that Massanutten submit plans and schedules to address all of the outstanding issues regarding the new Plant.
13. Although Massanutten has made diligent efforts to do so, it has been unable to comply with certain provisions of the Order because of circumstances beyond its control. Massanutten has made substantial progress in completing the upgraded Plant, but it was unable to meet the original completion date of May 15, 2003.
14. By letter dated April 7, 2004 and fax received May 4, 2004, Massanutten submitted its proposed revised schedule of compliance for completion of the Plant upgrade and I&I work in the collection system.
15. Given the foregoing, the State Water Control Board and Massanutten agree that it is appropriate to amend the Order as described below.

SECTION C: Agreement and Order

Accordingly, the Board, by virtue of the authority granted it in §62.1-44.15(8a), orders Massanutten and Massanutten agrees to perform the actions described in Appendix A of this Amendment, which supercedes Appendix A of the Order. Both the Board and Massanutten understand and agree that this Amendment does not alter, modify, or amend any other provision of the Order.

And it is so ORDERED this 1st day of September, 2004.

Robert G. Burnley
Robert G. Burnley, Director
Department of Environmental Quality

Massanutten voluntarily agrees to the issuance of this Order.

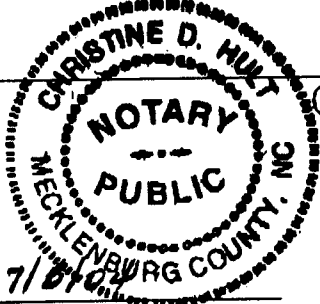
By: [Signature]

Title: VICE-PRESIDENT

Date: 7/6/04

State of ~~Virginia~~ North Carolina
City/County of Mecklenburg

The foregoing instrument was acknowledged before me this 6TH day of JULY, 2004,

by Carl Daniel who is Vice-President of
(name)
on behalf of the Massanutten Public
Service Corporation
Christine D. Hult
Notary Public

Date

My commission expires:

~~My Commission Expires September 26, 2004~~

APPENDIX A
SCHEDULE OF COMPLIANCE
MASSANUTTEN PUBLIC SERVICE CORPORATION

As-built Plans and Specifications for the Plant Upgrade

1. **By August 15, 2004**, Massanutten shall submit to DEQ for review and approval the as-built plans and specifications for the upgraded Plant.
2. **By August 31, 2004**, Massanutten shall set up a meeting with DEQ to discuss the as-built plans and specifications for the upgraded Plant.
3. **By January 31, 2005**, Massanutten shall submit to DEQ approvable plans and specifications for the upgraded Plant and request a CTO inspection.
4. **By February 28, 2005**, Massanutten shall schedule a site inspection for the purposes of receiving a conditional CTO for the Plant upgrade excluding the second equalization basin.

Completion of Second Equalization Basin

5. Massanutten has submitted to DEQ for review and approval the engineering plans and specifications for the second equalization basin. Massanutten shall respond to comments regarding the plans and specifications **within 30 days** of receipt of written comments.
6. **By June 30, 2004**, Massanutten shall permanently seal the gate valve connection between the Lagoon #1 and Lagoon #2 of the former Plant and begin pumping wastewater from Lagoon #2 to the new treatment Plant to lower the lagoon so that the solids can be removed. Massanutten shall regulate the pumping rates to ensure that design capacity of the Plant is not exceeded.
7. **By November 1, 2004**, Massanutten shall obtain a Certificate to Construct the second equalization basin and begin construction of the approved basin.
8. **By January 1, 2005**, Massanutten shall complete the removal and proper disposal of the sludge from the Lagoon #2. During the sludge removal process, Massanutten shall take all appropriate steps to control odor.
9. **By March 1, 2005**, Massanutten shall complete the grading of the site for the installation of a liner for the flow equalization basin and the aeration equipment and pumps.
10. **By May 1, 2005**, Massanutten shall complete the installation of the equalization basin liner and the aeration equipment and pumps.

11. **By June 1, 2005**, Massanutten shall request a CTO inspection for the entire Plant upgrade, and shall complete all work necessary for issuance of the CTO.
12. **Within 365 days** following issuance of a CTO for the upgraded Plant, Massanutten PSC shall complete acute and chronic confirmational toxicity testing. The acute and chronic confirmational toxicity testing shall be conducted on four separate sets of 24-hour composite samples of effluent from Outfall 001, not to be conducted more frequently than monthly, and shall include samples collected during the months of August and February. A testing lab having applicable, approved toxicity testing protocols on file with DEQ shall do the confirmational toxicity testing. The acute toxicity testing shall be no observable adverse concentrations (acute) (“NOAEC”) test with a passing end point of 100% effluent, rather than the LC50 tests, which were used in earlier acute toxicity testing of this Plant’s discharge. In order to successfully complete confirmational toxicity testing, all toxicity tests shall comply with the following endpoints (NOAEC = 100%, no observable effect concentration (chronic) (“NOEC”) \geq IWC). Each set of four toxicity tests shall be one acute and one chronic for each test species. The test results shall be submitted to DEQ within six weeks of the latest sampling date.

Closure of the Old Plant Lagoon #1

13. By letter dated March 5, 2004, Massanutten submitted to DEQ for review and approval a closure plan for lagoon #1. Massanutten shall respond to comments on the closure plan **within 30 days** of receipt of written comments.
14. **By June 1, 2005**, Massanutten shall take core measurements to estimate the quantity of sludge in the lagoon and submit to DEQ a description of the appropriate sludge disposal option from Massanutten’s approved Sludge Management Plan. Massanutten shall submit any testing results required for the selected disposal option.
15. **By August 1, 2005**, Massanutten shall begin the pumping of wastewater from Lagoon #1 to the new Plant in order to drain the lagoon. The lagoon shall be drained from the surface to prevent accumulated solids on the bottom from being carried out of the lagoon. Massanutten shall regulate the pumping to ensure that the Plant’s design capacity is not exceeded.
16. **By December 1, 2005**, Massanutten shall provide adequate treatment of the accumulated sludge on the floor of the lagoon to ensure it meets the definition of Class B biosolids. Massanutten shall test the sludge to confirm that the sludge meets Class B standards for pathogen reduction and vector attraction reduction and submit results to DEQ.
17. **Within 390 days** of completing construction of the second flow equalization basin which is utilizing lagoon 2, Massanutten shall complete the closure of Lagoon #1 in accordance with an approved closure plan.

I & I Reduction Studies in the Collection System.

18. **By June 30, 2004**, Massanutten shall complete visual inspection and dry and wet weather flow observations/or measurements of the collection system and identify problem areas.
19. **By December 31, 2004**, Massanutten shall complete smoke testing and/or televise the problem areas in Area 1 (referenced in the maps submitted to DEQ on October 9, 2003) as determined in the initial inspections.
20. **By June 30, 2005**, Massanutten shall complete smoke testing and/or televise the problem areas in Area 2 (referenced in the maps submitted to DEQ on October 9, 2003) as determined in the initial inspections.
21. **By December 31, 2005**, Massanutten shall complete repairs identified in Area 1 as prioritized in the I&I studies.
22. **By December 31, 2005**, Massanutten shall complete smoke testing and/or televise the problem areas in Area 3 (referenced in the maps submitted to DEQ on October 9, 2003) as determined in the initial inspections.
23. **By June 30, 2006**, Massanutten shall complete repairs identified in Area 2 as prioritized in the I&I studies.
24. **By June 30, 2006**, Massanutten shall complete smoke testing and/or televise the problem areas in Area 4 (referenced in the maps submitted to DEQ on October 9, 2003) as determined in the initial inspections.
25. **By December 31, 2006**, Massanutten shall complete repairs identified in Area 3 as prioritized in the I&I studies.
26. **By June 30, 2007**, Massanutten shall complete repairs identified in Area 4 as prioritized in the I&I studies

Collection System Management Plan:

27. **By January 1, 2006**, Massanutten shall submit to DEQ for review and approval its plan for conducting future ongoing I&I work and the annual budget for the next three years that will be allocated to conduct that work. Massanutten shall respond to any questions concerning the plan **within 30 days** of receipt of written comments.
28. Massanutten shall submit semi-annual progress reports to DEQ, with the first report being due **October 10, 2004**. Subsequent Progress Reports will be due by **January 10, April 10, July 10 and October 10** along with the Facility's Discharge Monitoring Report until the cancellation of the Order. The semi-annual progress reports shall contain:

- a. a summary of all work completed since the previous progress report in accordance with this Order.
 - b. a projection of the work to be completed during the upcoming 6 months in accordance with this Order; and
 - c. a statement regarding any anticipated problems in complying with this Order.
29. No later than **14 days** following a date identified in the above schedule of compliance Massanutten shall submit to DEQ's Valley Regional Office a written notice of compliance or noncompliance with the scheduled item. In the case of noncompliance, the notice shall include the cause of noncompliance, any remedial actions taken, and the probability of meeting the next scheduled item.